

STEREO MOC Status Report
Time Period: 2014:195 - 2014:201

STEREO Ahead (STA) Status:

1. The following Ground System anomalies/events occurred during this reporting period:

- On day 197, APL-18m station successfully supported the tracking, recording, processing, and transmitting of the space weather broadcast from each observatory to the SSC at GFSC.
- On day 197, during the DSS-65 support, turbo decoder lock was lost briefly at 0805z. This anomaly resulted in the loss of one frame of SSR data.
- On day 198, a connectivity test was conducted with DSS-35, the new 34m BWG antenna at the DSN Canberra complex, was successfully conducted at 2150z. The MOC successfully bound with telemetry server and with the station for commanding, received spacecraft telemetry with a good SNR, and sent 31 commands to the station only, from all three MOC command workstations.
- On day 200, during the DSS-15 support, turbo decoder lock was intermittent for the 4.6 hour duration of the support due to elevation encoder anomaly at the station. This anomaly resulted in the loss of 23,983 frames of SSR data. See DR #G115245 for more information.

2. The following spacecraft/instrument events occurred during this week:

- During the solar conjunction testing on Ahead, on day 188, after the commanded system reset to simulate solar conjunction entry, when the star tracker finally promoted to AAD mode, it incorrectly provided attitude solutions for approximately three minutes. This offpointed the spacecraft by 75 degrees. The star tracker corrected itself and the G&C resumed nominal sun pointing. A similar anomaly has occurred with same star tracker on the MESSENGER mission.

- On day 195, the IMPACT SIT instrument successfully ramped up the high voltage to science configuration level.
- On day 196, during the DSS-84 support, a parameter was loaded to G&C RAM to enable GT rates usage at 1647z. This corrected the intermittent loss of fine pointing that had been occurring since the spacecraft was recovered from the system reset practiced during solar conjunction testing on day 192. This G&C parameter had been inadvertently omitted due to mission evolution of the reset recovery operations last executed in 2009. The standby mode reset recovery procedure has been updated accordingly.
- The average daily SSR playback volume for Ahead was 5.2 Gbits during this week.

STEREO Behind (STB) Status:

1. The following Ground System anomalies/events occurred during this reporting period:

- On day 197, APL-18m station successfully supported the tracking, recording, processing, and transmitting of the space weather broadcast from each observatory to the SSC at GFSC.
- On day 195, DSS-63 declared the receiver orange due to an issue with the cryogenic system. This anomaly degraded the downlink signal by 10 dB, resulting in the loss of real-time telemetry and ranging data for the duration of the 3.4 hour support. This anomaly resulted in the loss of up to 20 hours of SSR data for some instruments. See DR #M108153 for more information.
- On day 199, during the DSS-63 support, turbo decoder lock was lost briefly at 1230z. This anomaly resulted in the loss of 16 frames of SSR data.
- On day 201, during the DSS-55 support, turbo decoder lock was lost briefly at 1237z. This anomaly resulted in the loss of four frames of SSR data.

2. The following spacecraft/instrument events occurred during this week:

- On day 196, the 29th SECCHI stepped calibration was executed at 0435z for the perihelion in the orbit.
- On day 196, the 20th HGA Calibration was successfully executed at 1300z.
- The average daily SSR playback volume for Behind was 4.7 Gbits during this week.